

Remarks

Claims 53-79 are currently pending. Claim 75 has been amended. Claim 76 has been cancelled. Applicants assert that all claims are in condition for allowance as set forth more fully below.

Double Patenting

Claims 53-81 are rejected under the doctrine of obviousness type double patenting over claims 1-28 of US Pat. 6,624,616 and over claims 1-28 of US pat 6,441,589. A terminal disclaimer is included for each of these references such that the double patenting rejections may now be withdrawn.

102 Rejections

Claims 53-57, 59, 66-68, 70, 75 and 76 stand rejected under 35 USC 102(e) as being anticipated by Bork (US Pat 6,633,932). Applicants respectfully traverse these rejections.

The Office Action rejects independent claims 53, 66 and 75 by stating that Bork teaches all of the elements. The Office Action equates units **42** (a USB Function Controller and a voltage regulator), **52** (+ Data line), **54** (- data line) of FIG. 14 of Bork to the supervisory circuit and its connections to the secondary battery of claims 53, 66 and 75. Bork teaches a standard USB +4.5V voltage being output from the PC power source **26** to supply to the voltage regulator **44**, and then utilizes the voltage regulator to provide a pre-set +3.7 v, 370 ma power to the cell phone. Thus, Bork is not concerned with using a supervisory circuit to determine a battery's voltage requirement and instructing a voltage converter to output a modifiable voltage that is a required voltage for the battery.

Claim 53

Claim 53 recites a supervisory circuit associated with a voltage requirement of a secondary battery and a voltage converter in communication with the supervisory circuit, wherein when the secondary battery is in contact with the supervisory circuit, the supervisory circuit instructs the voltage converter to supply a voltage to the secondary battery in accordance with the voltage requirement. Thus, the voltage converter gets an

instruction from the supervisory circuit based on the supervisory circuit's association with the voltage requirement of the secondary battery. The voltage converter then supplies a voltage to the secondary battery (i.e. the required voltage) based on the instruction. These recitations of claim 53 are contrary to Bork.

Bork does not teach that the electronic circuitry **42** instructs the voltage converter (in the PC **26**) to deliver a specific voltage to the battery **14** in compliance with the battery's voltage requirement. The electronic circuitry **42** in Bork enumerates the device with the USB and then reduces the maximum current and voltage from the USB port (+4.5v) to a pre-set (3.7v, 370 ma) voltage that may be used by the cell phone (FIG. 14, 19; Col. 7, l.5-10; Col. 8, l. 7-17) and transmits the D- and D+ data signals. The electronic circuitry **42** does not send an instruction to a voltage converter regarding the voltage to be sent to the cell phone but instead converts whatever voltage is being received to the pre-set voltage that is appropriate for the cell phone. Since Bork does not teach electronic circuitry instructing a voltage controller to provide a voltage in response to a voltage requirement, Bork does not teach all of the claimed elements and for these reasons claim 53 is allowable over Bork.

Claim 66

Similarly, Claim 66 recites, in part, that the supervisory circuit determines a voltage requirement of the secondary battery, and the supervisory circuit then instructs the voltage converter to supply a voltage to the secondary battery in accordance with the voltage requirement. These recitations of claim 66 are also contrary to Bork.

In Bork, the electronic circuitry **42** in communication with the PC **26**, receives data signals D+ and D- from the PC and furthers the signal to the phone **14**. The electronic circuitry **42** also reduces the +4.5V DC power from the PC to the pre-set +3.7 v power being fed to the cell phone battery **14**. Bork does not teach that the electronic circuitry **42** makes a determination as to the voltage of the cell phone battery but instead, it appears that the output voltage of the electronic circuitry **42** is pre-set in accordance with the voltage of the cell phone battery. Nor does Bork teach that the PC Voltage Controller **26** controls its output based on receiving any instruction regarding the cell phone battery requirements but instead this PC outputs the standard USB voltage that is

unrelated to the cellphone battery requirements. Therefore Bork does not teach all of the claimed elements and for these reasons claim 66 is allowable over Bork.

Claim 75

Amended claim 75 now recites obtaining a voltage requirement of a secondary battery, wherein the obtaining involves a supervisory circuit in communication with the secondary battery and further recites instructing a voltage converter to receive power from a power source, to convert the power to meet the voltage requirement, and to supply the converted power to the secondary battery. These recitations of claim 66 are also contrary to Bork for similar reasons.

In Bork, the intervening electronic circuitry **42** in communication with the PC **26**, receives data signals D+ and D- from the PC and furthers the signal to the phone **14**. The electronic circuitry **42** also reduces the +4.5V DC power from the PC to the pre-set +3.7 v power being fed to the cell phone battery **14**. However, Bork does not teach that the electronic circuitry **42** obtains a voltage requirement of a secondary battery. The electronic circuitry **42** must already be pre-set to output the appropriate voltage to the cellphone battery. Furthermore, Bork does not disclose the PC receiving any instruction regarding converting power to meet the voltage requirement of the cellphone battery. To the contrary, the PC outputs the standard USB voltage that has no relation to the cellphone battery voltage. Therefore Bork does not teach all of the claimed elements and for these reasons claim 75 is allowable over Bork.

Accordingly, for at least the reasons above, claims 53, 66 and 75 are allowable over Stone. Dependent claims 54-65 and 76-81 depend from allowable claims 53, 66 or 75 and are also allowable for at least the same reasons.

103 Rejections

Claims 77-81 stand rejected under 35 USC 103(a) as being unpatentable over Bork in view of McClure (US Pat 5,198, 743). Claims 58, 60-62, 69 and 71-74 stand rejected under 35 USC 103(a) as being unpatentable over Bork in view of Rozsypal (US Pat. App. 2002/0101224). Claims 63-65 and 74 stand rejected under 35 USC 103(a) as

being unpatentable over Bork in view further in view of Hockaday (US Pat. 6,326,097). Applicants respectfully traverse these rejections.

As noted above for the §102 rejections, the claims in addition to independent claims 53, 66 and 75 that have been rejected under 35 USC §103 depend from either allowable base claim 53, 66 or 75 and are also allowable over the cited references for at least the same reasons.

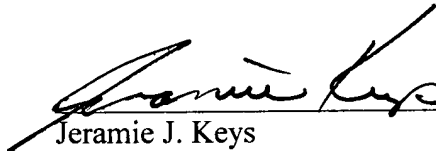
Conclusion

Applicants assert that the application including claims 53-81 is now in condition for allowance. Applicants request reconsideration in view of the amendments and remarks above and further request that a Notice of Allowability be provided. Should the Examiner have any questions, please contact the undersigned.

No fees new are believed due. However, please charge any additional fees or credit any overpayment to Deposit Account No. 50-3025.

Respectfully submitted,

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